

CLAIMS

1. A method for the preparation of soluble molecular complexes comprising one or more active substances which are poorly soluble in an aqueous medium, included in one or more host molecules, characterized in that it consists of the following steps:

(a) bringing one or more active substances into contact with one or more host molecules,

10 (b) carrying out a molecular diffusion step by bringing a dense fluid under pressure into contact, in static mode, with the mixture obtained in step (a) in the presence of one or more diffusion agents,

15 (c) recovering the molecular complex thus formed.

2. The method as claimed in claim 1, characterized in that the dense fluid under pressure is CO₂.

20 3. The method as claimed in either of claims 1 and 2, characterized in that the active substance is a pharmaceutical active agent, preferably chosen from the group comprising analgesics, antipyretics, aspirin and its derivatives, antibiotics, anti-inflammatory agents, 25 antiulcer agents, antihypertensives, neuroleptics, antidepressants, oligonucleotides having a therapeutic activity, peptides having a therapeutic activity and proteins having a therapeutic activity, a cosmetic active agent or a nutraceutical active agent.

30 4. The method as claimed in claim 3, characterized in that the active substance is chosen from the group comprising anilide derivatives, epipodophyllotoxin derivatives, minoxidil, piroxicam, valeric acid, 35 octanoic acid, lauric acid, stearic acid, tiaprofenic acid, omeprazole and eflucimibe.

5. The method as claimed in any one of claims 1 to 4,

characterized in that the host molecule is chosen from the group consisting of polysaccharides and monosaccharides, preferably from cyclodextrins and a mixture thereof.

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6. The method as claimed in any one of claims 1 to 5, characterized in that the diffusion agent is chosen from the group consisting of alcohols, ketones, ethers, esters and water with or without surfactant and mixtures thereof.

10 7. The method as claimed in claim 6, characterized in that the diffusion agent is water.

15 8. The method as claimed in any one of claims 1 to 7, characterized in that step (b) of molecular diffusion is performed with stirring.

20 9. The method as claimed in any one of claims 1 to 8, characterized in that the diffusion agent is added continuously or batchwise in a quantity of between 1 and 50% by mass, preferably between 20 and 25% by mass.

25 10. The method as claimed in any one of claims 1 to 9, characterized in that the pressure of the supercritical fluid is between 5 MPa and 40 MPa and the temperature is between 0 and 120°C.

30 11. A soluble molecular complex comprising one or more active substances which are poorly soluble in an aqueous medium, included in one or more host molecules, characterized in that it is capable of being obtained by the method as claimed in any one of claims 1 to 10.